



January 2025

## MULTISPECTRAL 12 Bands– version 1 (Obsolete)

R: 850  
G: 510  
B: 405

Image 1

R: 710  
G: 570  
B: 480

Image 3

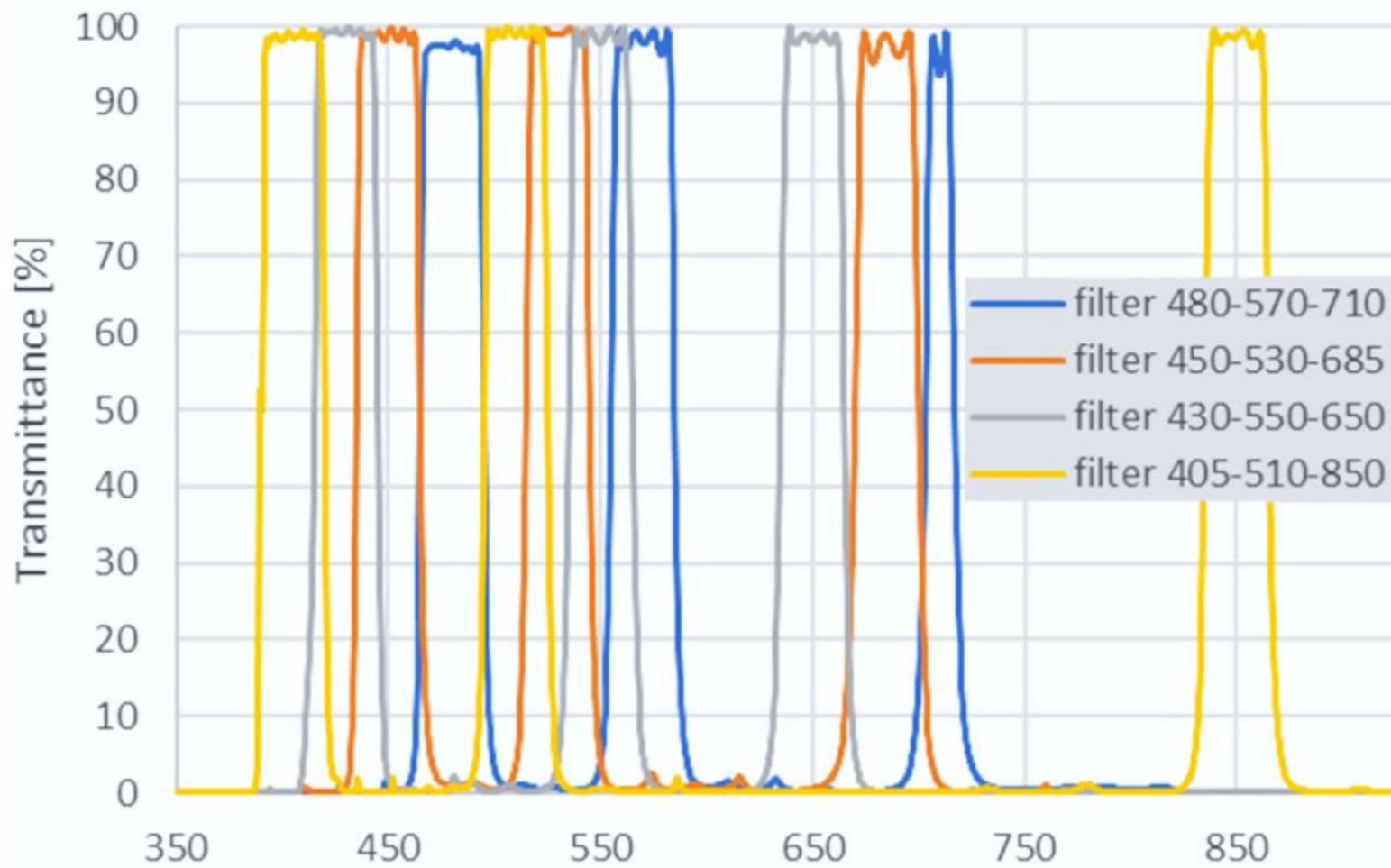
R: 650  
G: 550  
B: 430

Image 2

R: 685  
G: 530  
B: 450

Image 4

## MULTISPECTRAL 12 Bands – version 1 (Obsolete)



## MULTISPECTRAL 10 Bands – version 2

R: 850

G: -----

B: -----

Image 1

R: 710

G: 570

B: 405

Image 3

R: 650

G: 550

B: 430

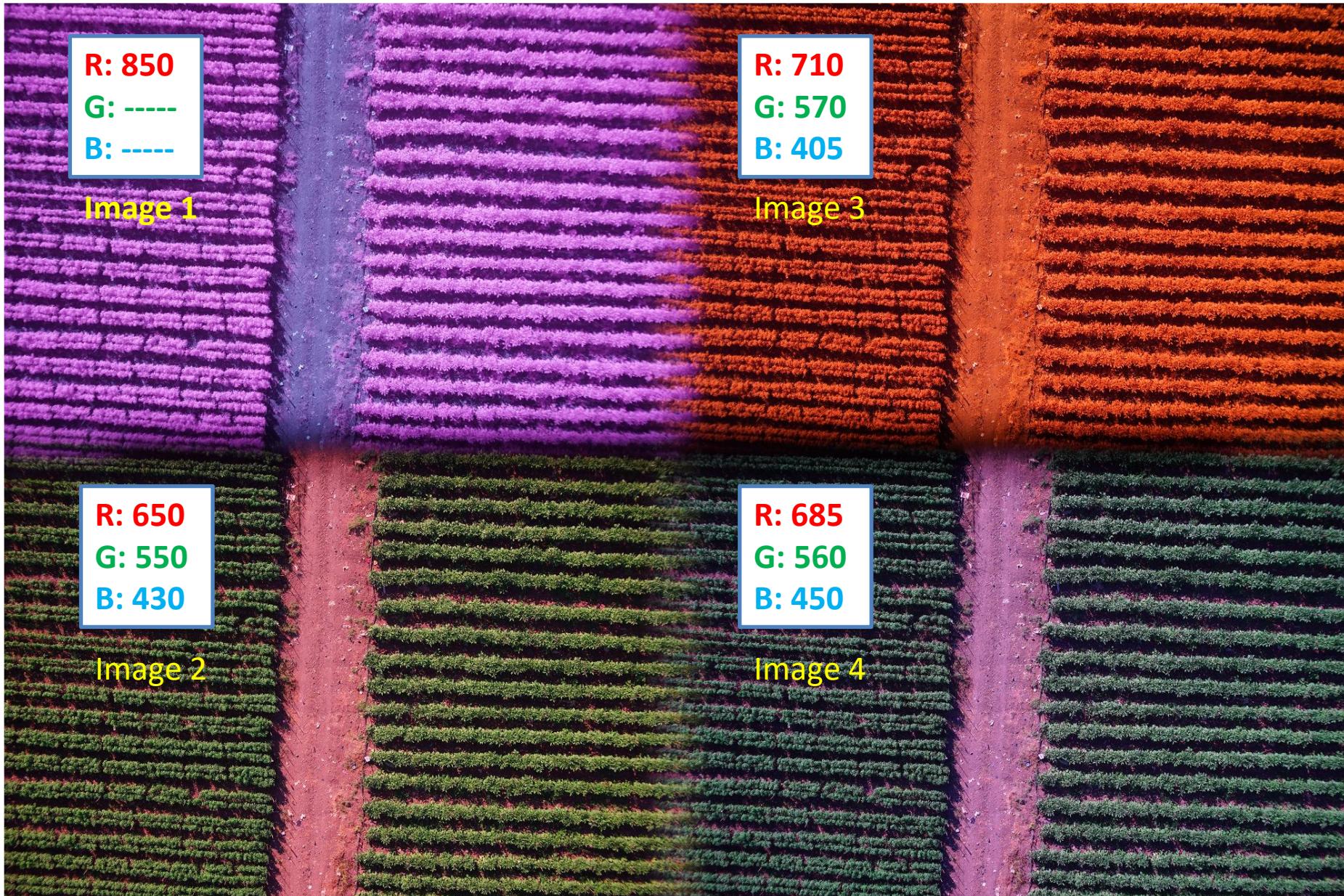
Image 2

R: 685

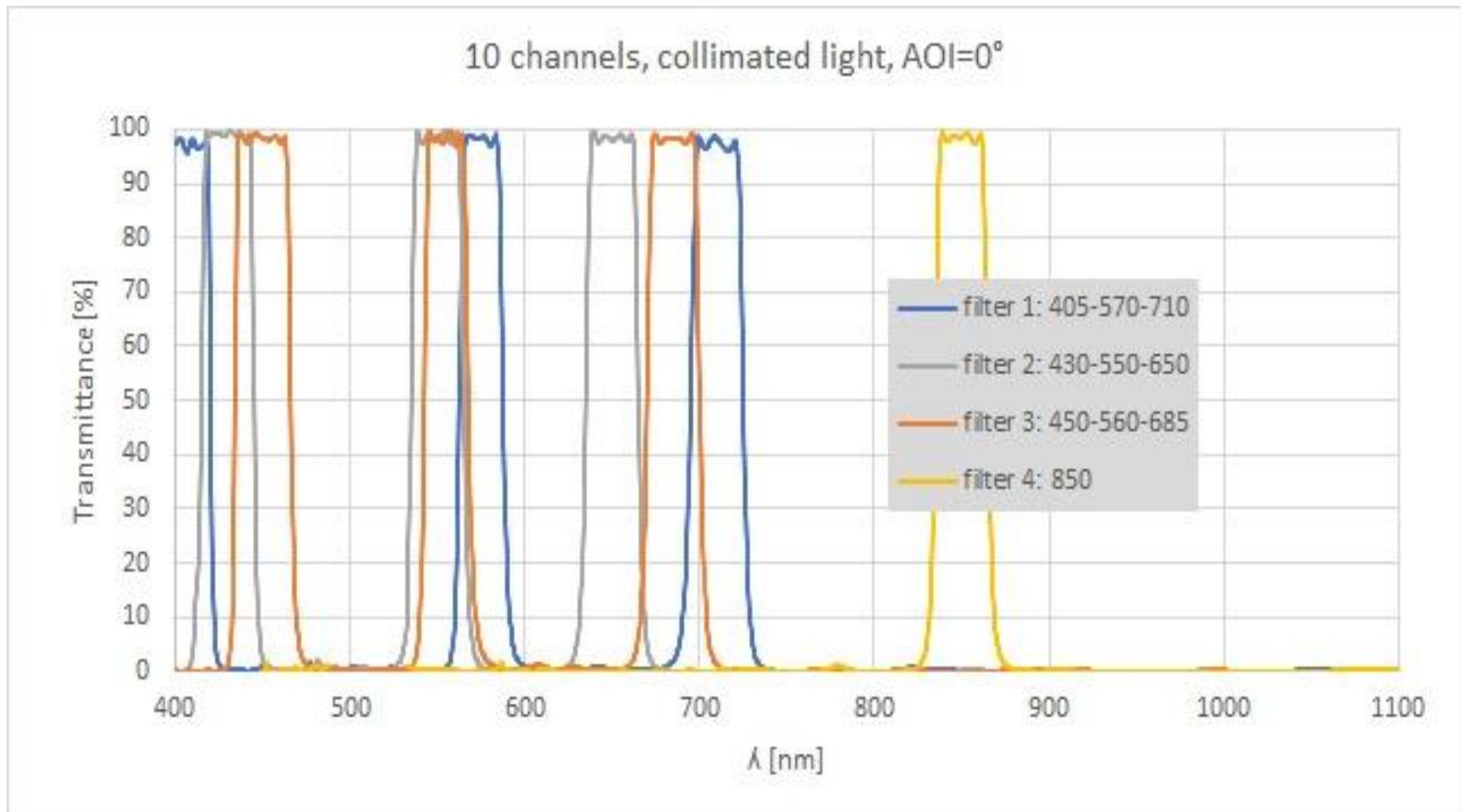
G: 560

B: 450

Image 4



## MULTISPECTRAL 10/11 Bands – version 2



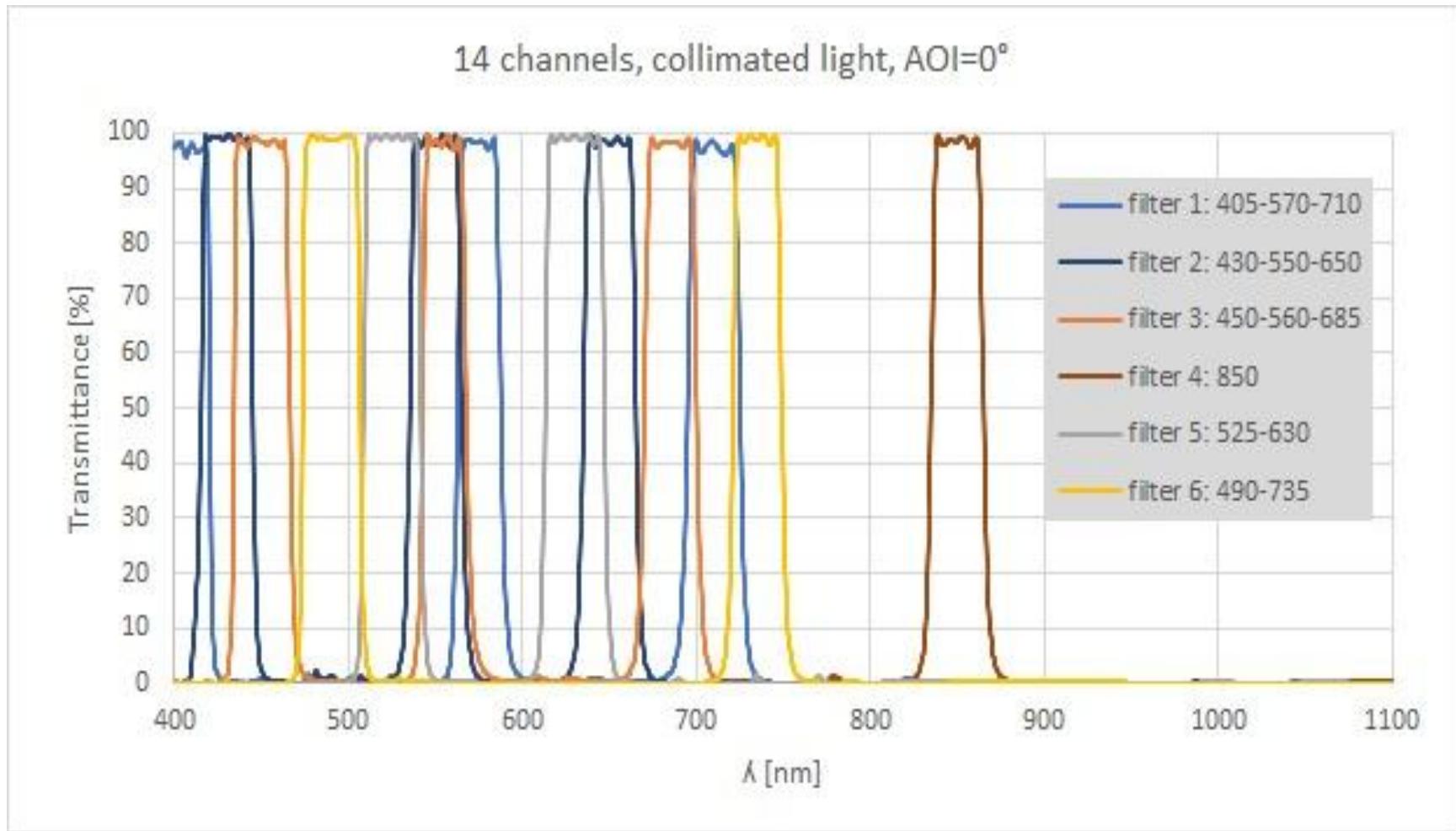
\*option to replace any of 4 filters with WRGB filter.

\*option to replace any of 4 filters with Dual 470nm+795nm or 710-570-480 filter.

# MULTISPECTRAL 14 Bands – version 1



## MULTISPECTRAL 14/15 bands – version 1



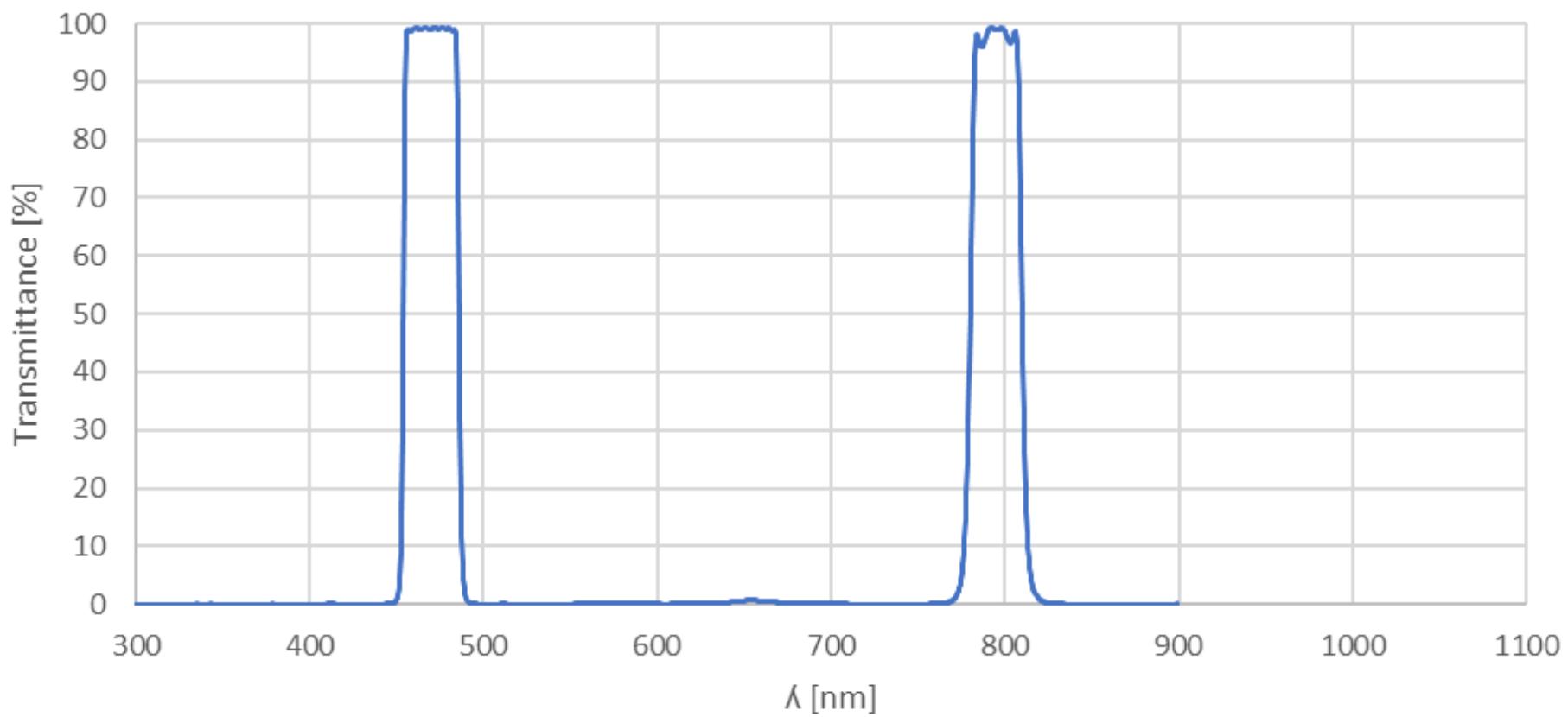
\*option to replace 1-2-3-4 filters with WRGB filter

\*option to replace any of 6 filters with Dual 470nm+795nm or 710-570-480 filter.

## MULTISPECTRAL 15 bands – custom version example



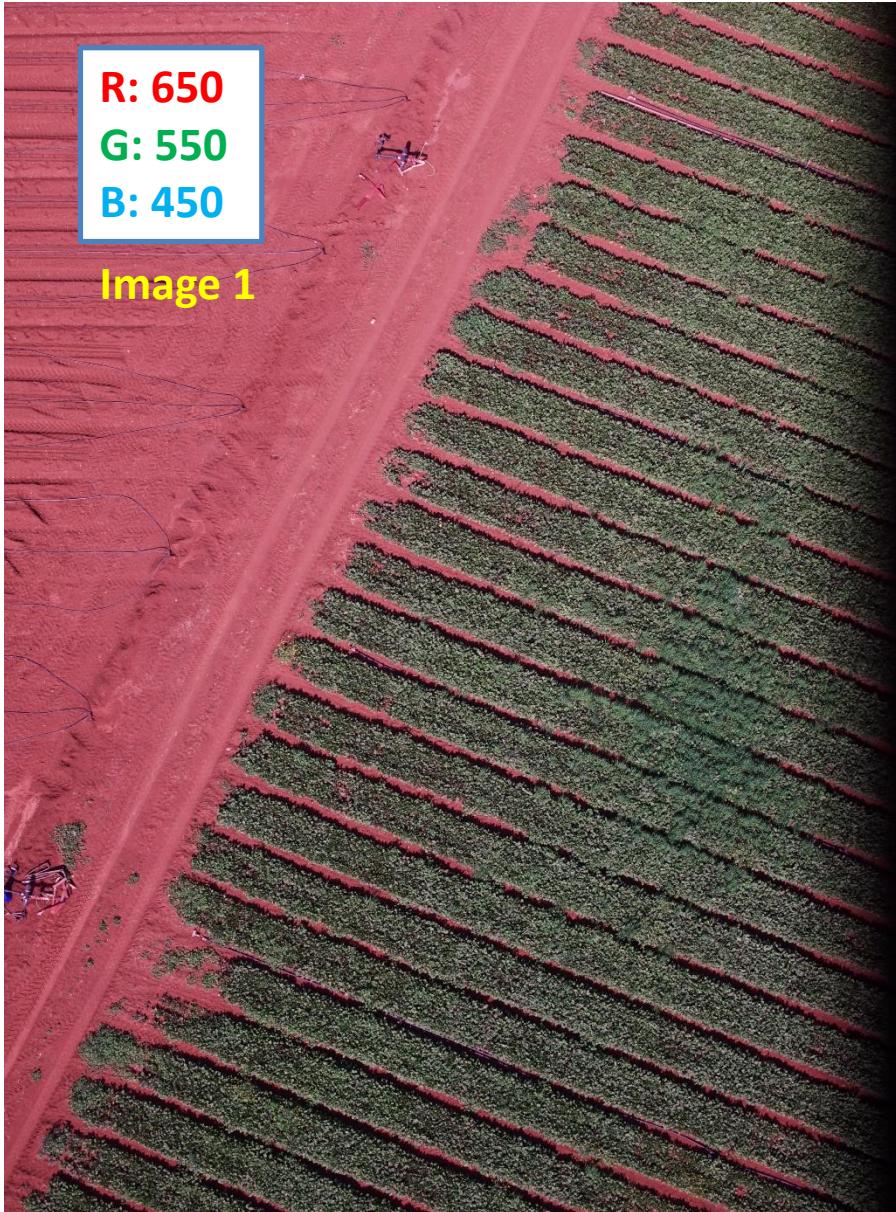
Dual BP filter 470-795 at collimated light, AOI=0°



## MULTISPECTRAL 4 R10C/A6x00 – NDVI Lens

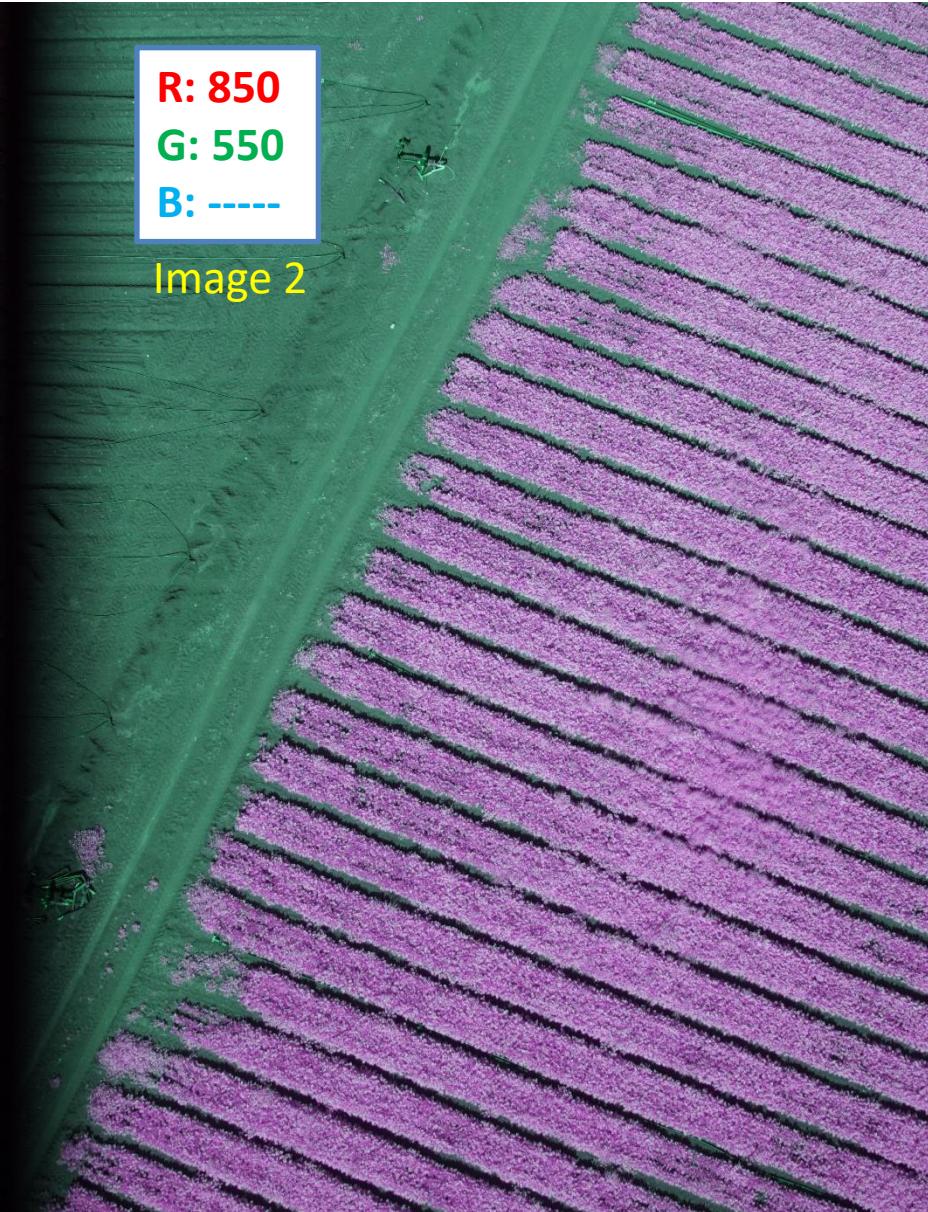
R: 650  
G: 550  
B: 450

Image 1



R: 850  
G: 550  
B: -----

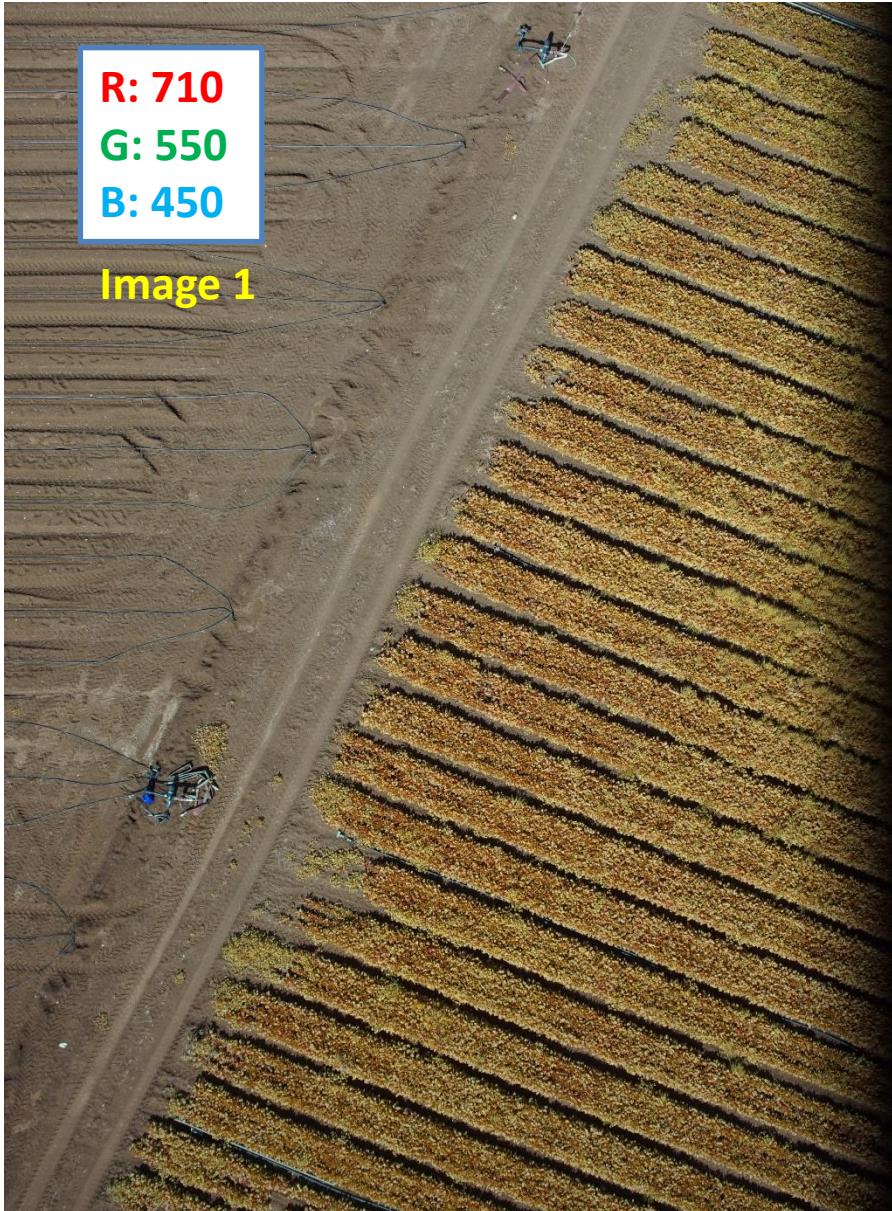
Image 2



## MULTISPECTRAL 4 R10C/A6x00 – RedEdge Lens

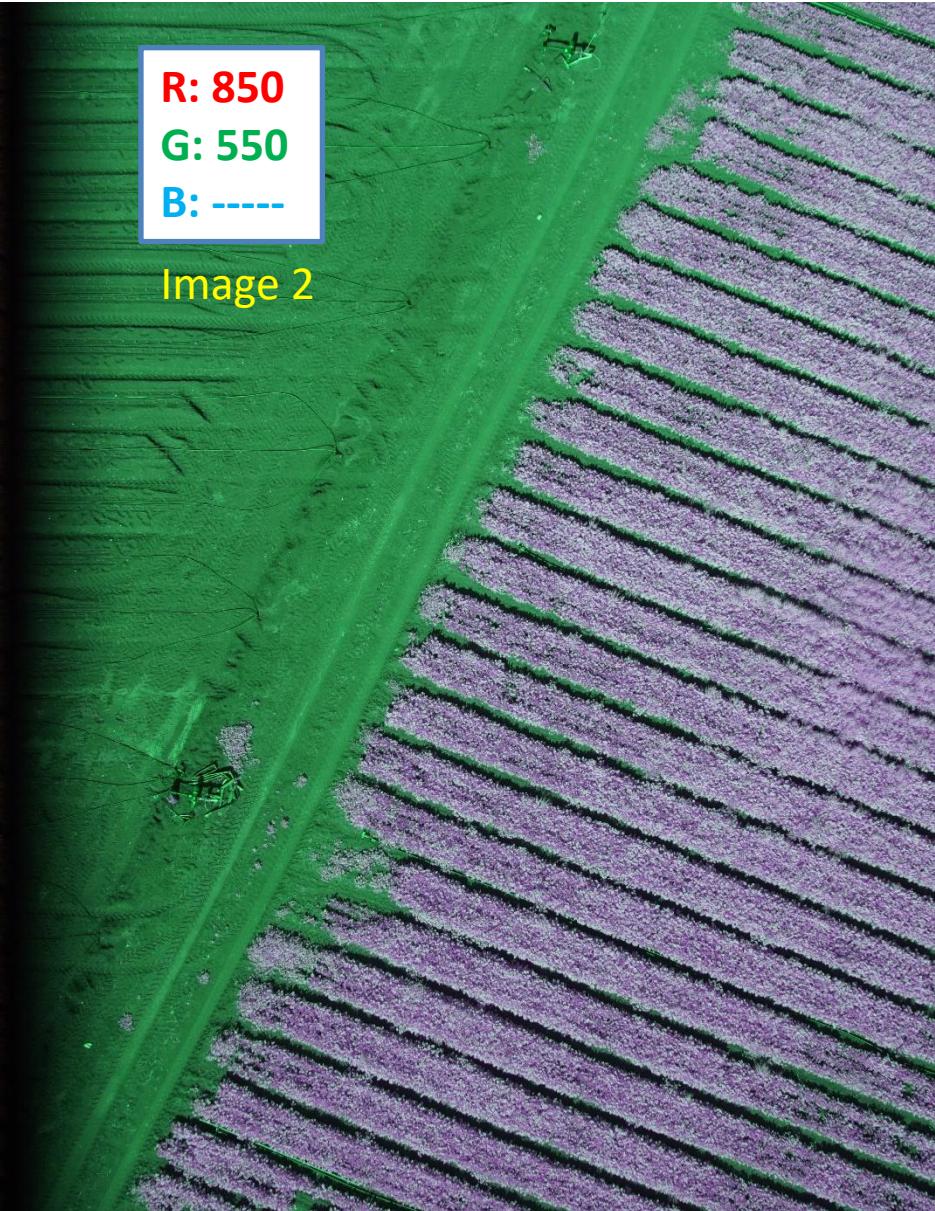
R: 710  
G: 550  
B: 450

Image 1



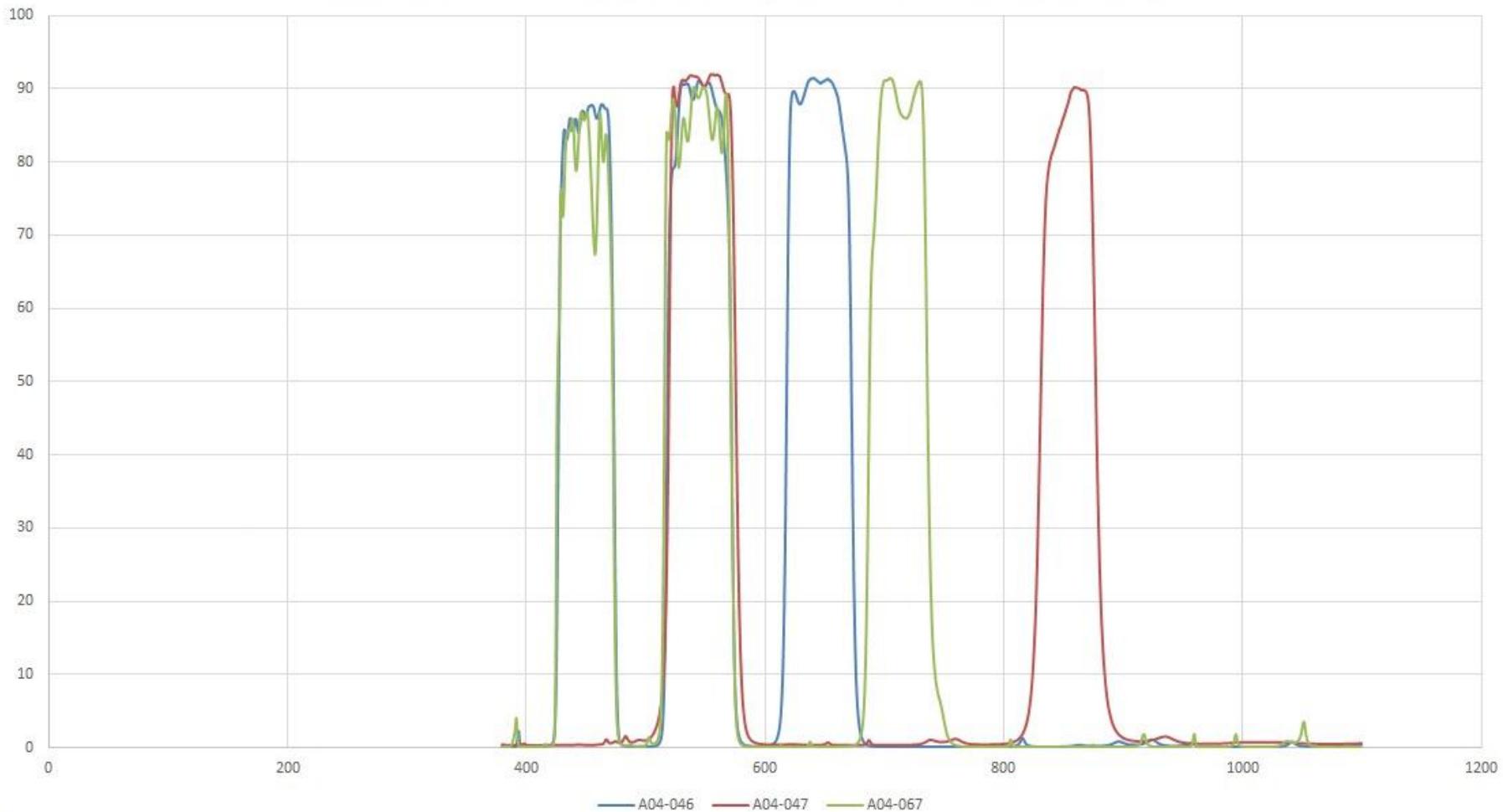
R: 850  
G: 550  
B: -----

Image 2



# MULTISPECTRAL 4 R10C/A6x00 – NDVI/RedEdge Lens

APS-C Filters Combined  
RGB 450;550;650nm – blue; NIR 550;850nm – red; Red-Edge 450;550;710 nm - green



## A growing sensors

Model	Sony ZV-E10/ A6x00 series	Sony A7Rii/iii Quad 25mm	Sony A7R4/ILX-LR1 Quad 25mm	Sony A7CR/ILX-LR1 Quad 55mm	Sony A7R4/ILX-LR1 Sextuple 21.8mm
<b>Sensor Resolution</b>	6000x4000 24 MP	7952x5304 42 MP	9504x6336 61 MP	9504x6336 61 MP	9504x6336 61 MP
<b>Lens type</b>	4 - Band	10/11 – Band	10/11 – Band	10/11 – Band**	14/15-Bands**
<b>Multispectral Resolution per Band*</b>	2516x3976 10 MP	3544x2316 8.2 MP	4300x2800 12 MP	4300x2800 12 MP	2700x2600 7.0MP
<b>100m GSD</b>	1.55 cm	1.64 cm	1.5 cm	0.68 cm	1.72
<b>200m GSD</b>	3.1 cm	3.29 cm	3.0 cm	1.36 cm	3.43
<b>300m GSD</b>	4.6 cm	4.9 cm	4.5 cm	2.04 cm	5.15
<b>Recommended shutter speed</b>	1/1000 – 1/4000				
<b>Minimum camera re-trigger time in seconds</b>	1	1.5	<1/3fps with ILX-LR1	<1/3fps with ILX-LR1	<1/3fps with ILX-LR1

\* Resolution per band applicable for aerial imagery based on Sony sensor effective pixels after demosaicing, cropping and alignment

\*\* Configurable up to 11 for Quad and 15 for Sextuple bands from existing 8 filter combinations

## MULTISPECTRAL Filter Combination Options

Lens Type	Basic Configuration				Optional Filters		
Quad 25mm	R: 850 G: --- B: ---	R: 650 G: 550 B: 430	R: 710 G: 570 B: 405	R: 685 G: 560 B: 450	R: 710 G: 570 B: 480	R: 795 G: --- B: 470	
Quad 55mm	R: 850 G: --- B: ---	R: 650 G: 550 B: 430	R: 710 G: 570 B: 405	R: 685 G: 560 B: 450	R: 710 G: 570 B: 480	R: 795 G: --- B: 470	R: 630 G: 525 B: ---
Sextuple 21.8mm	R: 850 G: --- B: ---	R: 650 G: 550 B: 430	R: 630 G: 525 B: ---	R: 735 G: --- B: 490	R: 710 G: 570 B: 480	R: 795 G: --- B: 470	R: 735 G: --- B: 490
	R: 710 G: 570 B: 405	R: 685 G: 560 B: 450					